Java Workflow Tooling (JWT)
Juno Review
Release Review

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Overview

- About JWT

- Release 1.2

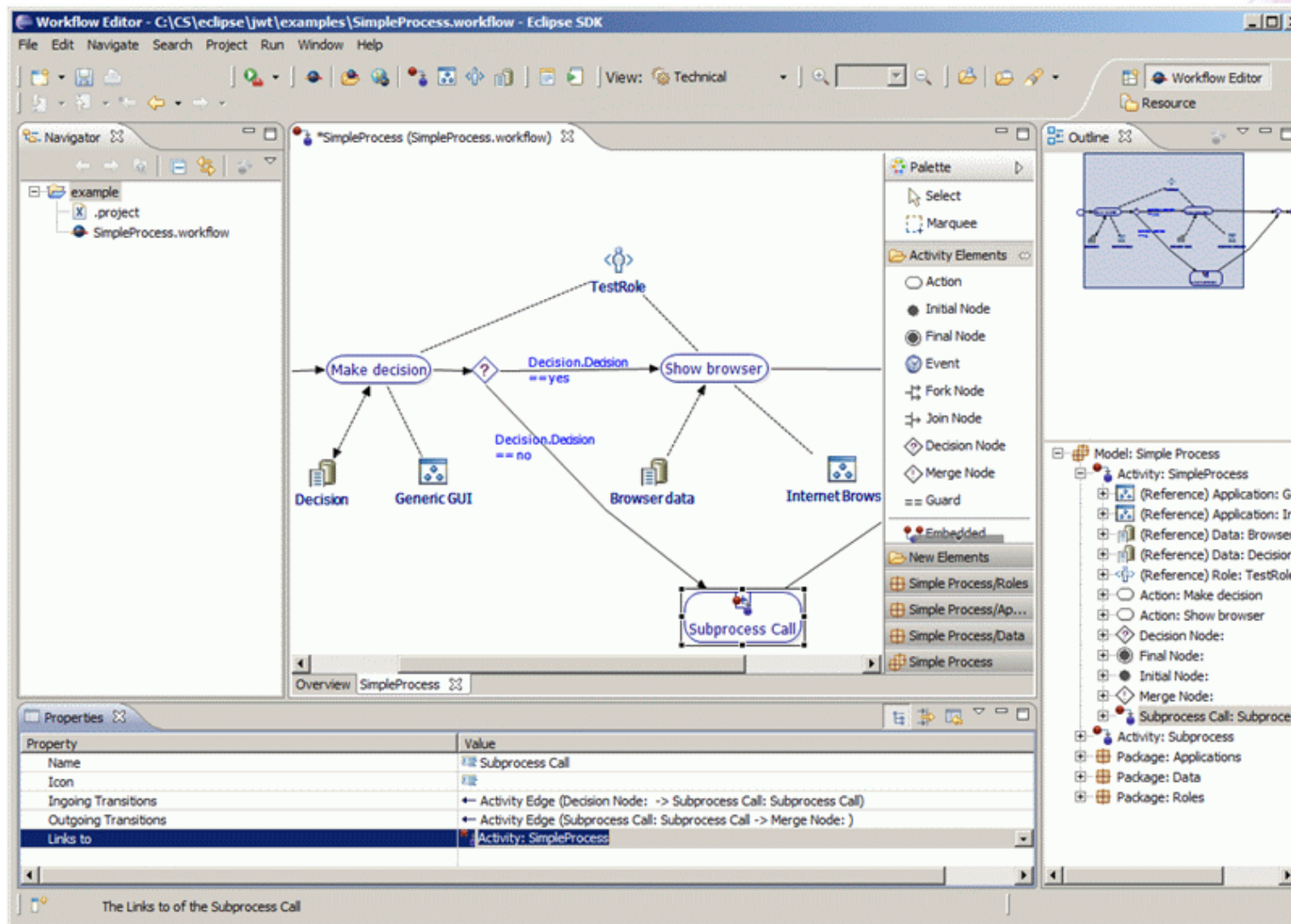- Communication

About JWT - Overview

Java Workflow Tooling (JWT) aims at providing a complete Business Process Management (BPM) and workflow tooling platform

A special focus lies on a unified approach to BPM design, allowing to bridge the gap between different process representations, standards, engines and deployment environments (platforms, information systems, SOA)
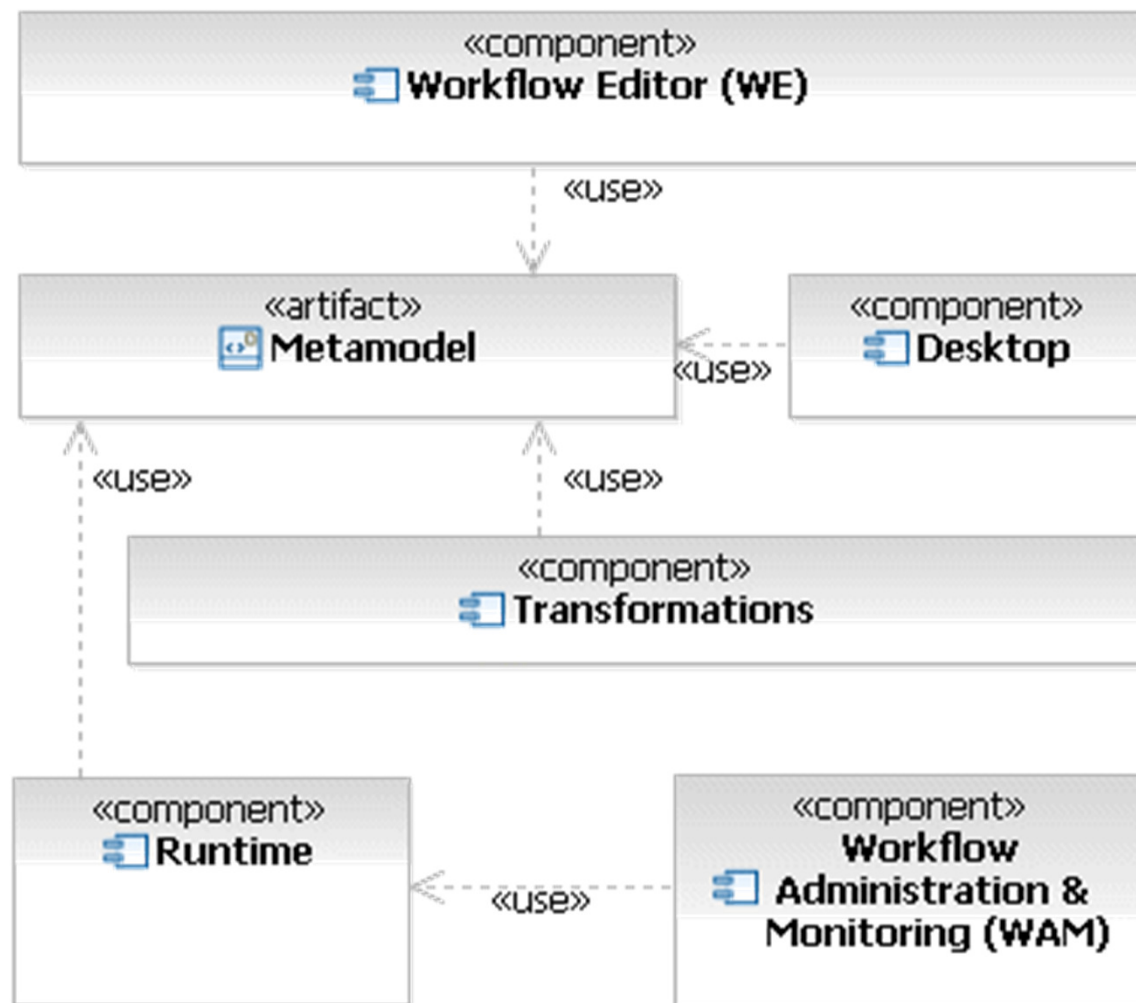
Goals

- Support for workflow and business process modeling, deployment, execution and monitoring inside Eclipse

- Provide a complete, flexible, interoperable and usable BPM toolkit

- Set of generic and extensible plugins and APIs

- Documentation (HTML) & image (BMP, PNG, SVG, JPG) exports

- Extensions allowing support for specific business representations, process language formats, process engines, service platforms, etc.

- Targeting and supporting SOA in close collaboration with Eclipse SOA projects : BPMN, SCA, Mangrove and others

JWT Screenshot

About JWT - Components of JWT

About JWT - Status

- JWT is a mature project in Eclipse SOA, already part of the yearly release train since Eclipse 3.5 „Galileo"

- The usage of JWT (Workflow Editor, Transformations, …) is well documented in its Wiki

- Several pages on the wiki provide developer documentation. All extension possibilities by external plugins are documented there, and have examples that are available at least in the SVN.

- Ongoing development and active mailing list

About JWT - Maturity

- The build process is automatized for continuous integration and runs JUnit tests

- Since Eclipse 3.5 „Galileo" JWT is part of the yearly release train

- Well-documented in Wiki

- Several example plugins are available that demonstrate the usage

- JWT is used in development and production
  - It has been integrated in several third-party solutions like e.g. AgilPro or OW2 Scarbo. **OW2 Scarbo 1.2 has been released** in November 2011 and is **used in production** by ANCV in Paris, France.
  - Mailing list exchanges show new products being built on JWT, by companies like Mastek LTD, India and research work being done by labs like the German University in Cairo, Egypt.

Release 1.2 – Features & BugFixes

- Support for Eclipse 4.2
  - [Bug 377748] JWT and Eclipse 4
  - [Bug 377734] Eclipse 4.1 hangs when changing JWT view
  - [Bug 377647] NullPointerException loop when dragging "Activity" elements in diagram editor

- SVG Export (based on GMF)
  - [Bug 327563] Export workflow to SVG image

- We focused on improving Workflow Editor usage.
  - [Bug 377565] JWT Capabilities (UI Activities) problems
  - [Bug 297221] Adding new conf-model doesn't change dirty flag

- Doc & Howtos have also been enriched in the process

- The announced BPMN view feature is currently in development and will be shipped with the next release.

Release 1.2 – APIs

- The code conforms to the Eclipse Quality.

- The API has been officially declared (using PDE tooling) prior to this release.

- Several examples have been tested and JUnit tests exist.

- Build (includes unit testing) has been fully automated in CBI and is easily repeatable.
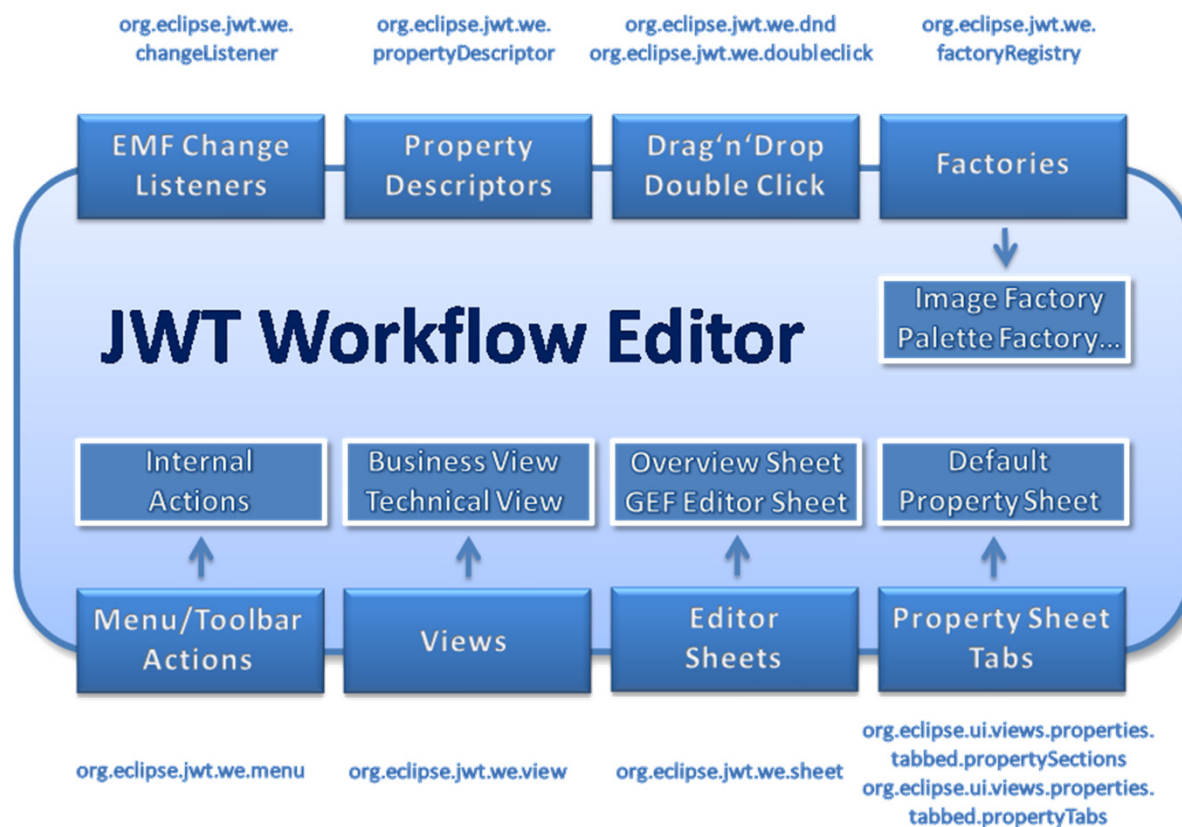
Release 1.2 – Non-Code Aspects

- Documentation is up to date and constantly improved, mailing lists and bugzilla are constantly used, news are written on the website.

- Until this date, two articles about JWT have been published in the german „Eclipse Magazin"

- Several presentations about or involving JWT have been given
    - Eclipse Summit Europe 07, EclipseCon08, Open World Forum 2008, EclipseCon09, Solutions Linux 2009, Eclipse Forum Europe 2009, Eclipse Europe Summit 2009 and EclipseCon10, Eclipse Indigo DemoCamp Grenoble 2011

- **Eclipse DemoCamp Juno 2012** in Grenoble, 2012 June 13
    - 5 minutes "SVG" talk & 20 minutes "EMF ECM integration" on Juno by Yoann Rodière & Marc Dutoo, see http://wiki.eclipse.org/Eclipse_DemoCamps_Juno_2012/Grenoble

Release 1.2 – Architectural issues

- Several extension points available that are already used by plugins in order to extend the JWT Workflow Editor.

Release 1.2 – Tool usability

- JWT enables a user to model his/her processes and workflows and use these models not only for documentation, but also for execution.

- The model can be used to generate code in different languages (such as XPDL)

- The model can be transformed to other models (e.g. SOA BPMN & Mangrove).

- The model's documentation or screenshots can be exported.

- It provides a lot of extension points where others can build on it and extend several parts of the editor, see http://wiki.eclipse.org/JWT_Extensions

- If necessary, the meta-model can be adapted to the needs of each user through Aspect Oriented Modeling.

Release 1.2 – End-of-Life

- There are no features that are end-of-life'd in this release.

Release 1.2 – Bugzilla

- 6 bugs / feature requests have been **closed** since the last release.

Target Milestone

	1.2 M7	1.2 RC1	Total
Transformations	1	.	1
WE	3	2	5
Total	4	2	6

Component

- There are currently 60 remaining **open** bugs / feature requests. These bugs are non-critical and will be assigned to future milestones.

Target Milestone

	---	1.3 M6	Total
Releng	3	1	4
Website	1	.	1
Desktop	1	.	1
Metamodel	7	.	7
Transformations	7	.	7
Wam	1	.	1
WE	37	.	37
Yearly Release	2	.	2
Total	59	1	60

Component

Standards

The relationship to existing standards has been achieved by the following:

- Addition of a UML Activity diagram view
- Addition of a EPC model view
- Transformation to the Eclipse STP BPMN modeler
- Codegeneration of XPDL possible

- Existing transformation to the SOA Mangrove model (formerly STP IM), which aims to bridge different standard oriented tools within the STP project, like BPMN and SCA editors or BPEL.

UI Usability

- The Workflow Editor supported originally several languages such as English, German and French. For the latest releases we collaborated with Babel so that much more languages now exist.

- Several wizards exist to ease the usage of the Workflow Editor.

- All transformations are easily selectable via Import and Export menus thanks to the transformation base.

- The Eclipse User Interface Guidelines have been followed.

- JWT features can be managed in Eclipse UI Capabilities (Activities).

Communities

- Active bugzilla usage by the committers and others (extenders).

- Many discussions on the mailing list, inside JWT as well as with partners from the SOA projects (**Mangrove**, BPMN, SCA, etc.).

- Discussions with several companies (Bull, jBoss, **EasiFab**) have produced collaboration (ex. BPM model comparison, FactoryRegistry) and keep feeding JWT's requirements.

- Solutions built on JWT include AgilPro and OW2 Scarbo (Open Source). Mailing list exchanges show new products being built on JWT.

- Coordination with several OW2 projects such as Bonita, Orchestra, FraSCAti, Spagic, Scarbo.

- Coordination with the Open Wide-led **EasySOA** project aiming at bringing agility to the whole SOA process and its partners Bull, Talend, Nuxeo, INRIA.

- The University of Augsburg is an official Eclipse Foundation Member

IP Issues

- The code has been committed by individuals who are either committers of the project themselves or their foundation. Code contributions from others have undergone a CQ.

- The contribution questionaires for all components have been completed.

- The legal information has been inserted into the source code as described in the Eclipse IP Policy.

- There are no outstanding CQs and the IP log has been committed and approved for this release.

Project plan and IP log

- The current project plan can be found at
  - http://www.eclipse.org/projects/project-plan.php?projectid=soa.jwt

- The IP log can be found at
  - http://www.eclipse.org/projects/ip_log.php?projectid=soa.jwt
  - Currently no open IP requests

Communication

- ■ **Project Leads**
  - ▪ Marc Dutoo, Open Wide
  - ▪ Christian Saad, Augsburg University (release engineer)

- ■ **Communication Channel**
  - ▪ JWT Mailing List: jwt-dev@eclipse.org